Cedar River Instream Flow Commission

Final Minutes

SPU Water Quality Lab

March 6th, 2013

Organizations/Members Present:

- Seattle Public Utilities -- Tom Fox, Rand Little, Karl Burton
- Seattle City Light Liz Ablow
- Washington Department of Fish and Wildlife -- Peggy Miller
- USFWS: -- Tim Romanski
- NOAA Fisheries -- Randy McIntosh
- Army Corps of Engineers -- Lynne Melder and Larry Schick
- Washington Department of Ecology -- Buck Smith
- Muckleshoot Indian Tribe -- Holly Coccoli
- **I. Call to Order:** Tom called the meeting to order at 9:43 AM.
- **II. Approval of Agenda:** Approved as presented.
- **III. Approval of Draft Minutes:** March draft minutes were approved and finalized after some minor changes requested by Lynne.
- IV. News and Notes: Buck announced that DOE had a new director named Maia Bellon. Before joining the Dept. in 2010, Maia worked as an assistant attorney general in the Ecology Division of the Washington State Attorney General's Office. After joining Ecology, Maia worked as the Deputy Program Manager and then Program Manager for the Water Resources Program, before getting hired as the new director in February.

Holly reported that the City of Renton Transportation Department has decided to change to LED bulbs for lights that directly illuminate the Cedar River. Roger Tabor (USFWS) has information indicating that outmigrating sockeye are disoriented by light at night, which can cause them to temporarily discontinue their outmigration and move towards shore, which is thought to increase the rate at which they encounter predators.

Lynne said that the next IFC meeting is scheduled to be located at the new Corps building in Seattle.

V. Real Time Water Management:

Hydrologic Conditions: Chester Morse reservoir elevation is approximately 1552.6' and rising. Last week we had some rain and some snowmelt contributing to the reservoir. Tom said he plans to maintain the current flow level in the river. The recent disparity between Cedar and Tolt rain gages has been attributed to a hole in the Cedar watershed rain gage which caused rain totals in the basin to be underestimated. SPU has corrected the rain data for the period of concern but, even after the correction, rain totals for the months of December, January and February are below average. The 8-week moving average for inflow is lower than average and both watersheds have approximately 115% of average snow pack. Currently, instream flows in the Cedar River below Landsburg are approximately 800 cfs. Tom will maintain current release rates unless an unexpected storm occurs and releases need to be reduced to prevent scour. All downramping requirements were met successfully since the last meeting. Current demand is approximately 100 MGD and very similar to demand in 2012. The dynamic rule curve is calling for an elevation of 1448'. Tom stated that he intends to reduce the current elevation to 1551' after the next storm and then begin refill with a bit of a head start over the dynamic rule curve. Modeling runs indicate that the reservoir will refill this year even under 1 in 20 dry conditions. Tom also stated that supplemental flow for sockeye emigration will be supplied through mid April.

Lake Washington: The current elevation of Lake Washington is 20.66' and the Corps is continuing to refill with the expectation of reaching full pool by end of May after reaching 21.85' by the beginning of May. The smolt flumes will be deployed by mid-April.

Weather: Larry reminded the IFC that, for Puget Sound river systems, the flood season is generally over by early March. That means we have moved out of the period of highest scour risk for incubating salmon in the Cedar River. The current weather pattern is ENSO neutral. This pattern is often but not always associated with elevated probabilities for large floods but not this year, fortunately. We had lots of rain in late October, November and December and lots of snow in the mountains in December. January and February were below average for precipitation but the snow from December made up for that and the snowpack is still above average as a result. Forecasters are expecting near normal precipitation rates and temperatures for the next couple of months so it is unlikely we will experience an unusually long snow season or delayed snowmelt like we have seen in the last couple of years. The short-term forecast is calling for 6 to 8 inches of snow in the mountains tonight and Thursday with dry conditions expected for Friday and Saturday. A storm is expected to move into the region late Monday but most of the rain is expected to fall in areas north of Seattle and the Cedar River. Tom said that, given the forecast, he will most likely be able to provide slightly elevated flows for the kayak race (800-1000 cfs) this weekend without spilling any additional water.

Fish Update: Karl said that redd surveys for steelhead and trout will begin tomorrow, March 7th. Kelly Kiyohara sent an e-mail to provide the results to date for the inclined plane traps. Kelly estimates that 7 million sockeye fry have passed into the lake during times that the trap has fished. She also estimates that an additional 3 million sockeye may have emigrated during times that the trap was not fishing. Chinook outmigration appears to be robust with approximately 250,000 Chinook estimated to have moved passed the trap during nights that the trap was operational. Karl mentioned that 85% of spawning Chinook in 2012 were 3 year olds making the outmigration numbers even more encouraging.

VI. Supplemental Studies:

Peak Flow Adaptive Management Study Phase II

Topic 1, Scour Study - . Karl mentioned that he and Chris Magirl had added on more unconfined sample site to the sampling plan to balance the sampling for unconfined and confined habitats. That site is contained in the landslide reach below the golf course in river mile 5. Because the new site has both riffle and glide habitats, Chris left open the option of sampling both habitat types at the site. Karl mentioned that he is just about to submit the JARPA to federal, state and county entities after he gets answers to a couple of questions.

Topic 2, Off-channel Habitat Study - Rand passed out a graph that showed the historic 25%, 50% and 75 percentile flows at Renton between March 1st and June 30th. The IFC agreed to a flow range for the study of 300 to 1200 cfs. The IFC agreed on a definition of off-channel habitat during the last meeting. The definition included side channels, alcoves and backwater habitats. Rand said that the first step was to develop and inventory of these habitats below Landsburg. The second step would be to choose which habitats to sample and the third step would define what is to be measured for each habitat type and how it will be measured. GPS locations and field photographs will also be taken during the inventory. Rand said that he would put together a more detailed outline of the necessary steps that will be needed to complete this study.

Topic 3, Peak Flow and Geomorphic Function – Rand stated that he thinks there are two primary questions that need to be answered before moving forward with this study. First, what are the target or desired geomorphic conditions the IFC would like to see over time? Second, what do we want to measure in the sampling plan that would allow us to determine whether the desired conditions have developed over time? Finally, how important are the impairments in the system (e.g. levees, bank hardening, lack of LWD,) in terms of being able to reach the desired condition? Rand asked the group to think about target conditions that would be considered beneficial. The group

discussed this and came up with a few including: increased LWD, increased edge habitat, conifer dominated riparian zone, increased pool abundance and pool depth, multi braided channels. Rand asked the IFC to ponder this question further and be ready to discuss at the next meeting. Chris Magirl thinks a float down the Nisqually River would be a good surrogate for a river that exemplifies the desired geomorphic conditions. Some on the IFC thought the fact that the Nisqually was glacial and regulated may hinder its use as a surrogate. Rand said he would contact Chris and ask whether he thought there was a more appropriate river system to serve as a template for desired conditions.

VII. April 3rd Joint IFC/ADWG Meeting at the new Corps building:

- 1) USGS Peak Flow Phase 1 Powerpoint presentation
- 2) Otolith Study Presentation

VIII. Meeting adjourned at 12:50 PM